

Serial No. 10/727,727**Art Unit: 1774****REMARKS**

Claim 9 has been amended to add the phrase "whereby a synthetic fiber reinforced with a coated glass fiber is formed". Applicants submit that the amendment to claim 9 overcomes the Examiner's objection to the claims under 35 USC 112. If the amendment to claim 9 does not overcome the Examiner's objection to the claim, Applicants request that the Examiner suggest some language which would be suitable for introduction into the claim.

The invention as presently claimed is directed to a method of coating a glass substrate. The method comprising providing a glass substrate; applying to the glass substrate a coating composition comprising (1) an epoxy resin reaction product of epichlorohydrin and at least one component selected from the group consisting of bisphenol A and bisphenol F which reaction product is solvent free and liquid at 20°C; (2) from 1% to 98% by weight of a water-dilutable epoxy resin hardeners; (3) from 1% to 98% by weight of water; and (4) optionally, additives; and curing the coating composition. The main features of the invention which are carried over into the remaining claims is that the epoxy resin used in the coating composition is a solventless liquid at 20°C, epoxy resin reaction product of epichlorohydrin and at least one component selected from a group consisting of bisphenol A and bisphenol F. The coating composition also comprises a water-dilutable epoxy resin hardener. The composition can additionally contain additives and materials which are generally incorporated into epoxy resin formulations.

The composition of the present invention is advantageous in that the resin is a

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solventless liquid and does not contain a solvent which must be removed from the composition after the composition is applied to a substrate and before the composition is cured. This is a great advantage in application of the resin to a glass substrate.

Applicants respectfully submit that the present application is neither taught nor suggested by the prior art references cited by the Examiner.

Claims 1, 4-6 and 8-12 stand rejected under 35 USC 103(a) as unpatentable over Flynn (U.S. 3,901,833). Applicants respectfully submit that Flynn neither teaches nor suggests the present invention.

In the rejection, the Examiner states:

"Flynn is as set forth previously but does not specifically teach a solventless epoxy resin reaction product. However, Flynn teaches that his composition is characterized by a solvent content below about 0.5%. This teaching would have provided a suggestion to the skilled artisan for the use of a composition that is solventless, as required by applicants. Therefore, the prior art teachings of Flynn would have rendered obvious the invention as claimed in the present claims."

Applicants respectfully request that the Examiner reconsider the teachings of Flynn.

In particular Applicants invite the Examiner's attention to column 3, lines 34-46 which states that the epoxy resin and the curing agent are dissolved in a low boiling solvent, a reinforcing substrate such as a web, strand or roving is passed through the solution and the solvent is thereafter flashed off at an elevated temperature whereby the resin composition is evaporatively cooled and precure of the resin is minimized.

In another aspect of the invention a normally solid epoxy resin and a curing agent therefore are dissolved in a low boiling solvent and the resulting solution is dried at

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elevated temperature to recover a curable resin composition characterized by solvent content below 0.5%.

Applicants respectfully submit that it is clear that Flynn utilizes a solution of the resin and hardener in a solvent to be applied to the substrate which can be a glass fiber and the coated substrate is then heated to remove the solvent to a level of less than about 0.5%.

At column 7, beginning at line 10 and extending through column 9, line 25, Flynn explains the preparation of the solution of the resin in a solvent, applying the solution of the resin and hardener to the substrate and evaporating the solvent to provide a substrate coated with a mixture of the resin and hardener with a low content of solvent.

Applicants further invite the Examiner's attention to the examples which begin at column 10, line 40 and extend through column 15, line 29. Each of the formulations of the mixture of the resin and hardener contain substantially more solvent than the resin and hardener in the composition. Applicants respectfully submit that the composition of Flynn which is applied to the substrate is not a solventless, liquid at 20°C, epoxy resin.

The present invention overcomes the difficulties with the use of a solution of the resin since the composition which is applied to the glass substrate comprises a solventless epoxy resin which is liquid at 20°C.

Applicants respectfully submit that Flynn would teach one skilled in the art that it was necessary to utilize a solvent to adequately apply a mixture of an epoxy resin and a hardener to a substrate. In contrast to the teachings of Flynn, the present invention applies a solventless resin composition to the substrate. The present invention is neither taught

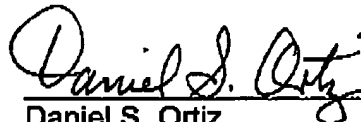
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nor suggested by Flynn in view of the large amounts of solvent required in the solution of the resin and hardener which is applied to the substrate. None of the examples in Flynn provides a composition containing water. Applicants therefore respectfully submit that a rejection based on Flynn is untenable and respectfully request that the rejection be reconsidered and withdrawn.

In view of the amendments entered in the claims and the above discussion, Applicants respectfully submit that the application is in condition for allowance and favorable consideration is requested.

Respectfully submitted,



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